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PTO/SB/21 (08-03)

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# TRANSMITTAL FORM

(To be used for all correspondence  
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Application Number	10/788,606
Filing Date	February 27, 2004
First Named Inventor	Mary E. Brunkow
Group Art Unit	1644
Examiner Name	Patrick Nolan
Attorney Docket No.	60117-109

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> CD(s), Number of CD(s)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Request for Corrected Filing Receipt	<input type="checkbox"/> After Allowance Communication to Group
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<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
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<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Declaration	<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Information Disclosure Statement; Form PTO-1449	<input type="checkbox"/> Statement under 37 CFR 3.73(b)	<input checked="" type="checkbox"/> Return Receipt Postcard
<input checked="" type="checkbox"/> Cited References	<input type="checkbox"/> Terminal Disclaimer	Additional Enclosure(s) (please identify below):
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Small Entity Statement	_____
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Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Individual Name	Jane E. R. Potter, Registration No. 33,332	22504
Signature		
Date	November 11, 2004	

## CERTIFICATE OF FACSIMILE TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date specified below.

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**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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Jessica Grant  
Printed Name

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mary E. Brunkow et al.

Application No.: 10/788,606

Filing Date: February 27, 2004

For: ANTIBODIES ASSOCIATED WITH ALTERATIONS IN BONE DENSITY

Art Unit: 1644

Docket No.: 60117-109

Date: November 11, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the requirements in 37 C.F.R. § 1.56, and in conformance with 37 C.F.R. 1.97 and 1.98, Applicant hereby submits a Supplemental Information Disclosure Statement.

Applicant respectfully requests that the Examiner: (1) consider the following documents during the course of his or her examination of the above-identified patent application, and (2) list the following documents in the References Cited section of any patent that may issue from the above-identified patent application.

Applicant cites 25 references listed on the attached substitute for form PTO-1449. The order of these references should not be construed to suggest their relative pertinence. The

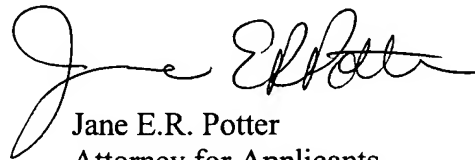
Examiner is encouraged to review the entire disclosure of each reference in order to draw his or her own conclusions concerning the pertinence of the references to the claimed subject matter of this application. The filing of this Information Disclosure Statement should not be construed to suggest that a patentability search has been made or that the cited references are prior art or are considered to be material to patentability.

Applicant respectfully requests consideration of the foregoing documents during examination of the above-identified patent application. Applicant has enclosed a completed Information Disclosure Statement by Applicant and copies of all publications.

No fee is believed due. If any fee is deemed due, the Commissioner is authorized to charge Deposit Account 04-0258 of Davis Wright Tremaine LLP. A copy of this document is enclosed.

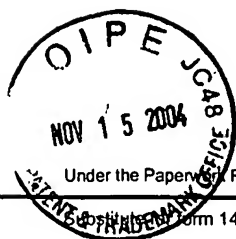
Respectfully submitted,

Davis Wright Tremaine LLP

A handwritten signature in black ink, appearing to read 'Jane E.R. Potter', written in a cursive style.

Jane E.R. Potter  
Attorney for Applicants  
Registration No. 33,332

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PTO/SB/08A (05-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/788,606
Sheet 1 of 4		Filing Date	February 27, 2004
		First Named Inventor	Mary E. Brunkow
		Art Unit	1644
		Examiner Name	Patrick Nolan
		Attorney Docket Number	60117-109

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	6,395,511	05-28-2002	Brunkow et al.	
	AB				
	AC				
	AD				
	AE				
	AF				
	AG				
	AH				
	AI				
	AJ				
	AK				
	AL				
	AM				
	AN				
	AO				
	AP				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	AQ	WO 02/24888 A2	03-28-2002	GENENTECH, INC.		
	AR					
	AS					
	AT					
	AU					
	AV					

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04 <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/788.606
				<b>Filing Date</b>	February 27, 2004
				<b>First Named Inventor</b>	Mary E. Brunkow
				<b>Art Unit</b>	1644
				<b>Examiner Name</b>	Patrick Nolan
Sheet	2	of	4	<b>Attorney Docket Number</b>	60117-109

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BA	Genbank Accession No. AAB33865, May 27, 1995.	
	BB	Genbank Accession No. CAA88759, January 8, 1997.	
	BC	Genbank Accession No. U25110, February 2, 1996.	
	BD	Genbank Accession No. Z48923, January 8, 1997.	
	BE	BENDAYAN, M., "Possibilities of False Immunocytochemical Results Generated by the Use of Monoclonal Antibodies: The Example of the Anti-proinsulin Antibody," J. Histochem. Cytochem. (1995) 43(9): 881-886.	
	BF	BOST ET AL., "Antibodies Against a Peptide Sequence within the HIV Envelope Protein Crossreacts with Human Interleukin-2," Immunol. Invest. (1988) 17(6&7):577-586.	
	BG	BRUNKOW ET AL., "Bone Dysplasia Sclerosteosis Results from Loss of the SOST Gene Product, a Novel Cysteine Knot-Containing Protein." Am. J. Hum. Genet. (2001) 68:577-589.	
	BH	CAMPBELL ET AL., "Totipotency or Multipotentiality of Cultured Cells: Applications and Progress," Theriogenology (1997) 47:63-72.	
	BI	COLMAN, P., "Effects of Amino Acid Sequence Changes on Antibody-Antigen Interactions," Research in Immunology (1994) 145:33-36.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>			
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		Filing Date	February 27, 2004		
		First Named Inventor	Mary E. Brunkow		
		Art Unit	1644		
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Sheet	3	of	4	Attorney Docket Number	60117-109

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	DURHAM ET AL., "Alterations in Insulin-Like Growth Factor (IGF)-Dependent IGF-Binding Protein-4 Proteolysis in Transformed Osteoblastic Cells" Endocrinology (1995) 136(4):1374-1380.	
	CB	HOFFMAN ET AL., "BMP Signaling Pathways in Cartilage and Bone Formation," Critical Review in Eukaryotic Gene Expression (2001) 11(1-3):23-45.	
	CC	LIAN ET AL., "Bone Formation: Osteoblast Lineage Cells, Growth Factors, Matrix Proteins, and the Mineralization Process," Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism, 4 <sup>th</sup> Edition (1999) 14-29.	
	CD	MULLINS ET AL., "Perspectives Series: Molecular Medicine in Genetically Engineered Animals; Transgenesis in the Rat and Larger Mammals," J. Clin. Invest. (1996) 97(7):1557-1560	
	CE	NICOLAS ET AL., "An Age-Related Decrease in the Concentration of Insulin-Like Growth Factor Binding Protein-5 in Human Cortical Bone," Calcif. Tissue Int. (1995) 57:206-212	
	CF	OSHIMA ET AL., "TGF- $\beta$ Receptor Type II Deficiency Results in Defects of Yolk Sac Hematopoiesis and Vasculogenesis," Developmental Biology (1996) 179:297-302.	
	CG	PITTENGER ET AL., "Multilineage Potential of Adult Human Mesenchymal Stem Cells," Science (1999) 284:143-147.	
	CH	POCKWINSE ET AL., "Expression of Cell Growth and Bone Specific Genes at Single Cell Resolution During Development of Bone Tissue-Like Organization in Primary Osteoblast Cultures," Journal of Cellular Biochemistry (1992) 49:310-323.	
	CI	SALI ET AL., "Comparative Protein Modelling by Satisfaction of Spatial Restraints," J. Mol. Biol. (1993) 234:779-815.	

Examiner Signature		Date Considered	
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Sheet	4	of	4	<b>Attorney Docket Number</b>	60117-109

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DA	SCHMITT ET AL., "Bone Morphogenetic Proteins: An Update on Basic Biology and Clinical Relevance," Journal of Orthopaedic Research (1999) 17:269-278.	
	DB	SCHLUNEGGER ET AL., "Refined Crystal Structure of Human Transforming Growth Factor $\beta$ 2 at 1.95 Å Resolution," J. Mol. Biol. (1993) 231:445-458.	
	DC	SERRA ET AL., "Expression of a Truncated, Kinase-Defective TGF- $\beta$ Type II Receptor in Mouse Skeletal Tissue Promotes Terminal Chondrocyte Differentiation and Osteoarthritis," J Cell Biol. (1997) 139(2):541-552.	
	DD	SMITH, "TGF $\beta$ Inhibitors, New and Unexpected Requirements in Vertebrate Development," TIG (1999) 15(1):3-5.	
	DE	ZIMMERMAN ET AL., "The Spemann Organizer Signal noggin Binds and Inactivates Bone Morphogenetic Protein 4," Cell (1996) 86:599-606.	
	DG		
	DH		
	DI		

Examiner Signature		Date Considered	
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